AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE			PAGE OF PAGES	
	T					1 3
2. MODIFICATION NO.:	3. EFFECTIVE DATE	4. REQUISITION/PURCHAS	PURCHASE REQ. NO.		PROJECT N	O. (If applicable)
0007	AUG 02, 2004	W81W3G-203	W81W3G-2035-7181			
6. ISSUED BY CODE	CA31	7. ADMINISTERED BY: CODE			CODE	E1P0100
Department of the Army Baltimore District, Corps of Engineers		Contracting Division, Contrac CENAB-CT-C	ts Brar	ich		
Contracting Division P.O. Box 1715		10 S. Howard ST. Room 7000)			
Baltimore MD 21203-1715		Baltimore, MD 21203-1715	1	ı		
8. NAME AND ADDRESS OF CONTRACTOR (No., st	treet, county, State and ZIP Co	ode)	(x)	9A. AMENDI	MENT OF SOI	LICITATION NO.
	v	DACA31-0)3-R-0030			
				Y 9B. DATED (SEE ITEM 11) MAY 26, 2004		
				10A. MODIFI NO.	ICATION OF	CONTRACT/ ORDER
				10R DATED	(SEE ITEM 1.	3)
				10B. DITTED	(SEE IIEM I.	5)
CODE	FACILITY CODE					
11. THIS	S ITEM ONLY APPLIES TO	O AMENDMENTS OF SOLI	CITA	TIONS		
The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. DATE OF RECEIPT OF PROPOSALS SEE BELOW Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
12. ACCOUNTING AND APPROPRIATION DATA (If required)						
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.						
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER No. ITEM 10A						
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR43.103(b)						
C. THIS SUPPLEMENTAL AGREEMENT IS I	ENTERED INTO PURSUAN	T TO AUTHORITY OF: chang	ges cla	use FAR 52.243	3.1	
D. OTHER (Specify type of modification and au	thority)					
E. IMPORTANT: Contractor is not, is required to						
14. DESCRIPTION OF AMENDMENT/MODIFICATION	ON (Organized by UCF section	on headings, including solicitati	on/con	tract subject mo	itter where fea	sible.)
DESIGN-BUI		IE NATIONAL DEFENSE AIR, WASHINGTON, DO		VERSITY, P	PHASE II	
	SEE THE FOLLOWING PAGES					
Except as provided herein, all terms and conditions of the	e document referenced in Item	9A or 10A, as heretofore chang	ged, rei	nains unchange	d and in full fo	orce and effect
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF	CON	TRACTING OF	FICER (Type	or print)

15C. DATE SIGNED

15B. CONTRACTOR/OFFEROR

NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE

(signature of person authorized to sign)

16B. UNITED STATES OF AMERICA

(Signature of Contracting Officer)

BY

30-105

16C. DATE SIGNED

STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243 AMENDMENT NO. 0007 TO RFP DACA31-03-R-0030 EFFECTIVE AUG 02, 2004

AMENDMENTS:

- 1) <u>Amendment 0006, Item 16:</u> Delete subsection Near East South Asia Center For Strategic Studies in its entirety as reissued by Amendment 0006 and substitute attached revised subsection Near East South Asia Center For Strategic Studies, dated July 7, 2004.
- 2) <u>Amendment 0006, QUESTIONS FROM PRE-PROPOSAL CONFERENCE AND RFIs:</u> Delete "(Questions and responses from RFI's below are being provided for information only and do not represent a change to the RFP)"

SOLICITATION:

- 3) <u>General:</u> The time and date for receiving proposals for this project is extended to 4:00 PM, local time, Aug 10, 2004. Revise Form 1442, Block 13A, of the Solicitation to reflect this change.
- 4) <u>Price Schedule:</u> Delete price schedule in its entirety as originally issued and substitute the attached revised price schedule, dated Aug 02, 2004.

SPECIFICATIONS:

- 5) <u>Section 01011 Design Criteria, Detailed Technical Design Criteria</u>: Delete Section G20 Site Improvements in its entirety and substitute attached revised Section G20, dated July 7, 2004.
- 6) <u>Section 01011 Design Criteria Section, Detailed Technical Design Criteria:</u> Section D30 Heating Ventilating and Air Conditioning (HVAC) Systems, Paragraph 1.2.2 delete entire paragraph and substitute the following: "With the exception of outdoor air intakes and exhaust hoods the Government strongly prefers HVAC equipment not be roof mounted. If required for preservation of interior program areas design solutions containing properly engineered outdoor systems which meet the screening requirements of the IDG and have the potential of NCPC/CFA approval will be allowed. A decorative screen shall be placed around all exterior grade mounted equipment. All screening solutions shall be designed by the project architect."
- 7) Section 01320A: Add attached new section.

QUESTIONS FROM RFIs:

- 1. Q. The POC for PEPCO listed in the RFP will not provide information required to price the relocation of the feeder. How are we to price this work? A. The bid schedule is being revised to provide an allowance for all work associated with relocation of the feeder. Currently the Govt. is talking with PEPCO about possible methods of dealing with the feeder. First method is to leave the feeder where it is and provide a manhole at points before and after it enters or leaves the building footprint. This solution would allow PEPCO to replace the section of feeder below the building if it should ever be necessary. The second method would be to conduct the feeder relocation and the construction of building foundations concurrently. If the current feeder were to require replacement prior to the relocated feeder being in service we would have to curtail construction activities 15 feet to either side of the current feeder alignment to allow PEPCO access for emergency repairs. The allowance stipulated in the new bid schedule is not intended to compensate for this unlikely event. An equitable adjustment to the DB contract would be negotiated to compensate for lost time and productivity.
- 2. **Q.** Given the lack of information being provided by PEPCO related to feeder relocation how are we to integrate this activity into our schedule? **A.** Offeror should assume the feeder requires relocation and stipulate the date by which it should be moved to support his proposed completion date.

AMENDMENT NO. 0007 TO RFP DACA31-03-R-0030 EFFECTIVE AUG 02, 2004

- 3. Q. In our estimation the 240,893 SF cap may not provide adequate space for all of the programmed spaces plus the necessary support and circulation space desired for a facility of this nature. Can the 240,843 SF be exceeded or may other areas be adjusted? A. The total program area is a fixed limit and cannot be exceeded. Each program listed in the RFP and the necessary support and circulation spaces are required to make the facility viable. Amendment 6 allowed most programs areas to share circulation space and clarified the HVAC requirements for meeting rooms. This Amendment allows for properly designed and screened outdoor mounted mechanical systems. All of these things may be partial solutions to the perceived space problem. In the end if no solution fits within the 240,893 SF allotted the Government will accept reduced program and support areas. Submit your proposal with the best solution you can devise and identify any areas that are reduced below the requested allotment.
- 4. **Q.** Please clarify the requirements for temporary parking? **A.** The temporary parking areas shown in Amendment 6 consists of two areas. The smaller piece, approximately 32 spaces, of temporary parking is adjacent to the Tennis Courts and is an appendage to the existing tennis court parking area. It consists of 32 new spaces just south of the existing lot and one new drive aisle just south of these spaces. The balance of temporary parking is to be provided in the rectangular strip of land running parallel to the Washington Channel.
- **5. Q.** What is the specification for the temporary parking area? **A.** The tennis lot shall follow the paving spec for permanent parking in the RFP. The Washington Channel parking area shall be constructed of 6 inches of aggregate and 2 inches of asphalt paving. Temporary parking layout shall preserve as many of the cherry tress lining the adjacent road as possible. Removal and restoration of the temporary parking areas is not in this contract.
- 6. **Q.** The 240,893 SF exceeds the 216,000 SF stipulated in the Master Plan. Will this extend the review period with the NCPC/CFA and potentially delay the design progress? **A.** No.
- 7. Q. Can we assume Liquidated Damages are in lieu of Actual and/or Consequential Damages? A. The Liquidated Damages stipulated are for the cost of extended field overhead for the Government Resident Office and for the cost of extended leases for NDU organizations in offsite leased facilities which would be prevented from relocating to the new building in the event of a late finish.

Attachments:

- 1) Revised Price Schedule, dated Aug 02, 2004
- Revised Section 01011 Detailed Technical Design Criteria subsection G20, dated July 7, 2004
- 3) Section 01011 Design Criteria Section, Second Floor Summary, Near East South Asia Center For Strategic Studies, dated July 7, 2004
- 4) Section 01320A

PART I - THE PRICE SCHEDULE SECTION 00010 - SUPPLIES OR SERVICES AND PRICES

ATTACHMENT TO ACCOMPANY AMENDMENT 0007 TO RFP DACA31-03-R-0030, AUG 02, 2004

PRICE SCHEDULE

ITEM		ESTIMATED			_
NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	AMOUNT
0001	All costs in connection with proposal preparation, design, and design reviews related to Marshall Hall Addition complete as shown in the design guidance in this Request for Proposal (RFP).	JOB		LS	\$
0002	All costs in connection with construction of the National Defense University expansion, complete as shown in the design guidance in this Request for Proposal (RFP), and in accordance with design documents prepared by the Contractor, but exclusive of work covered under Items 0003, 0004, 0005, 0006, 0007 and 0008 below.	JOB		LS	\$
0003	All costs in connection with construction of Access Control Point structures and equipment, complete as shown in the design guidance in this Request for Proposal (RFP), and in accordance with design documents prepared by the Contractor.	JOB		LS	\$
0004	All costs in connection with construction of the perimeter wall , complete as shown in the design guidance in this Request for Proposal (RFP), and in accordance with design documents prepared by the Contractor.	JOB		LS	\$
0005	All costs in connection with excavation, testing segregation, stockpiling, and disposal of special waste, complete as affected by the Contractors operations. Price shall include replacement of exported soils with suitable select fill.	8000	CY	\$	\$

PART I - THE PRICE SCHEDULE SECTION 00010 - SUPPLIES OR SERVICES AND PRICES

ATTACHMENT TO ACCOMPANY AMENDMENT 0007 TO RFP DACA31-03-R-0030, AUG 02, 2004

PRICE SCHEDULE

ITEM		ESTIMATED			
NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	AMOUNT
0006	All costs in connection with excavation, segregation, stockpiling, testing and disposal of hazardous waste complete as affected by the Contractor's operations.	2000	CY	\$	\$
0007	All costs in connection with collection, testing segregation, stockpiling, and disposal of contaminated groundwater, complete as affected by the Contractor's operations.	2,160,000	GAL	\$	\$
0008	Allowance for relocation of PEPCO feeder and PEPCO connection fees for new service.	JOB		LS	\$800,000

NOTES TO OFFERORS

Bid Item 0008 is an allowance item to be included in all offerors' proposals for the relocation of the PEPCO feeder relocation indicated on Sheet C-04 and any service connection fees PEPCO may charge for the new building.

VARIATION IN ESTIMATED QUANTITIES. If the quantity of a unit-price item in this contract is an estimated quantity and the actual quantity of the unit-price item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified. (FAR 52.211-18 APR 1984)

National Defense University – Marshall Hall Expansion Request for Proposal Amendment #6 SECTION G20 SITE IMPROVEMENTS DACA31-02-D-0001 April 26, 2004 July 7, 2004

PART 1 GENERAL (G2010)

1.1 SYSTEM DESCRIPTION

Provide site improvements required for a useable facility that meets the functional requirements and harmonizes with the existing natural and man-made environments.

1.2 SYSTEM REQUIREMENTS

- a. The Design-Build Contractor is responsible for obtaining all required permits and complying with all applicable Federal, State and Local regulatory requirements.
- b. Applicable Codes and Standards. Applicable published design and construction criteria are cited in Section 01011 "Design Criteria."
- c. The design of pavements shall take into consideration the anticipated traffic over the life of the project (minimum 20 years) and the soil conditions existing at the site. Provide pavement design in accordance with Paragraph 8 PAVEMENTS of the Geotechnical Report in Appendix B.
- d. The use of fly ash in concrete pavements and sidewalks shall be maximized, but shall not exceed 20% of cement content of each mix.
- e. The Marshall Hall Expansion structure constructed by this project is classified as a Primary Gathering Building under the DOD Minimum Antiterrorism Standards for Buildings. Required force protection standoff distances are indicated on the Site Plan at Appendix C. Detailed force protection requirements will be separately provided to the Design Build contractor by the Corps of Engineers.
- f. Existing and proposed site utility lines shall not be located under the building. Remove and reroute the existing site utility lines, as necessary.
- g. Site design should provide the following:
 - 1) The vehicular and pedestrian circulation system which shall promote safe, efficient movement of vehicles and pedestrians within the site area.
 - Parking areas within the project area to provide a total of 392 parking spaces. (This
 includes spaces for which special access must be provided under the Americans with
 Disabilities Act.)
 - 3) Concrete pad and trash collection dumpster at least 83 feet from the building
 - 4) Fire protection access per NFPA standards (as shown on plans, or equal)
 - 5) Site lighting around the buildings and in the parking areas.
 - 6) Sidewalks where pedestrian traffic will occur.
 - 7) Bollards, gates and barriers to meet force protection requirements (including access control at loading entrances)
 - 8) Service/loading entrance to the southwest corner of the building. Design driveway from the loading entrance and the existing Marshall Hall loading entrance, back to 5th Avenue, to accommodate WB-40 vehicle. Provide a 48 inch high dock at the loading area and two

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high bay entrances. Provide concrete approach to the loading dock, a minimum 24 feet wide by 50 feet long. Provide gate on the driveway at 83 foot setback from both the new building and existing Marshall Hall.

- 9) Landscape plan
- h. As part of the project, the contractor shall also provide a new main Access Control Point (ACP) to include the following:
 - 1) All facilities should be in general conformance with the Department of the Army guidelines for Installation Access Control
 - 2) The Access Control Point must include two inbound and one outbound vehicular travel lanes
 - 3) Travelways must be designed to accommodate a WB-50 vehicle
 - 4) Provide one guardbooth for each inbound vehicular lane; the guardbooth and adjacent travel lanes must be covered.
 - Provide stacking space on Fort McNair property in front of the guardbooths for at least two cars
 - 6) Provide a three person Visitor Control Center (VCC) immediately past the guardbooths, with an approximate footprint of 56 feet by 30 feet. The VCC must be climate controlled and provided with domestic water, sanitary, and electrical service. Provide a minimum of 10 parking spaces at the VCC, including handicap accessible spaces in accordance with ADA.
 - 7) Provide a heated, lit gatehouse, with building dimensions of approximately 30 by 20 feet, with restroom, located a minimum of 100 feet past the guardbooths. Provide a minimum of three parking spaces at the gatehouse.
 - 8) Beyond the VCC, provide a minimum of one entry lane for cleared traffic and a separate two- lane search area, within a building approximately 30 by 40 feet. The search area building is to be lit, roofed and enclosed, with openings for vehicle entry and exit. No vehicle doors are required.
 - 9) Provide two refusal points, one before vehicles enter the search area and one past the search area, where vehicles can be turned away from the entrance.
 - 10) Provide emergency backup power supply for all facilities at the ACP
 - 11) It is expected that a transition lane from the existing Second Street pavement into the ACP entrance lanes will need to extend some distance north on the Second Street right of way (District of Columbia property.) Approval of the District of Columbia Department of Public Works and Department of Transportation will be required for all work on DC right of way
 - 12) Provide appropriate gates at the guardhouses and pop up barriers at the ACP exit, and at the entrance lanes beyond the search area.
 - 13) Provide site lighting around the buildings and in the parking areas.
 - 14) Provide separate pedestrian entrance from Second Street, with guardbooth.
 - 15) For Anti terrorism- Force protection purposes, the VCC is considered an occupied building; the guardbooths, gatehouse, and search buildings are considered unoccupied. The VCC must be located a minimum standoff of 148 feet from any existing or proposed occupied buildings at Fort McNair, including the proposed Physical Fitness Center.
 - 16) Additional design criteria will be provided by the Corps of Engineers and Fort Myer Military Community.
 - 17) The Design Build contractor shall coordinate telecommunications and electrical requirements for the ACP with the COR and FMMC.
- i. The Physical Fitness Center will be constructed on the northern portion of the Tempo C site under a separate contract. The approximate location of the Fitness Center is shown on the site plan. The Contractor shall coordinate his operations with the COR and with other contractors on site.
- j. All sidewalks shall be Portland cement concrete and have a minimum thickness of 4 inches. Sidewalk design should provide:

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- 1) Low maintenance and high durability
- 2) Aesthetic suitability
- 3) Compatibility with each other and the existing surrounding landscape
- 4) Soil conditions, moisture and drainage capabilities.
- 5) Compatibility with microclimate, sun and shade requirements
- k. Signing. The Design-Build Contractor shall coordinate with the COR during final design to determine the requirements for exterior signs. For the purposes of this RFP, assume that signs will be required for the following purposes:
 - 1) No parking signs along access roads, fire lanes and at loading areas within the 83 foot setback from the buildings mandated by force protection requirements.
 - 2) Signs on handicapped parking spaces and identifying the "accessible path" per ADA requirements.
 - 3) Normal directional and traffic control signs.

1.3 CRITERIA

- a. Asphalt vehicular pavement sections on Fort McNair property shall be designed in accordance with U.S. Army Corps of Engineers criteria and the Department of the Army Technical Manuals referenced in Appendix B, Paragraph 8. Asphalt vehicular pavement sections outside Fort McNair property shall be designed in accordance with DC Department of Transportation criteria.
- b. The strength of base and subbase material, whether under asphalt or concrete pavement, shall be measured by its California Bearing Ratio (CBR), as determined by procedures defined in ASTM D 1883. Provide the minimum anticipated pavement section as discussed in Appendix B. Final pavement design should be based on site specific traffic data and subgrade characteristics.
- c. Vehicular pavement markings and signage shall be in accordance with Federal Highway Administration standards as given in "Rigid Sign Supports" and "Manual of Uniform Traffic Control Devices."

PART 2 SYSTEM COMPONENTS (G2020)

2.1 CLEARING AND GRADING

- a. Grading of Vegetated Areas.
 - 1) Minimum slopes across vegetated areas shall be one percent.
 - 2) Desirable maximum slope in vegetated areas is 3 : 1; absolute maximum slope in vegetated areas is 2½ : 1, unless geotechnical evaluation indicates that steeper slopes are allowable.
 - 3) Desirable minimum slopes in swale or channel centerlines shall be 1.0 percent; absolute minimum slopes in swale or channel centerlines shall be 0.50 percent.
 - 4) Minimum pipe or culvert slopes shall be 0.50 percent. Storm drain pipe, sheet flow surfaces, channels, and swales shall be designed to prevent standing water under normal conditions.

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- b. Grading of Roads and Pavements. Provide a positive crown in all streets and roads. Minimum cross slopes in streets and roads shall be 2% and the maximum cross slope shall be 4%. Minimum sheet flow slopes across parking area and other paved areas shall be 1 percent.
- c. Soil Preparation and Compaction. Provide soil preparation in accordance with Appendix B and site specific geotechnical data. Soil compaction shall be achieved by field compaction equipment approved by the professional geotechnical engineer consultant. Fill or backfill materials shall be placed in maximum 6-inch compacted thickness lifts, and shall be moistened or aerated as necessary to achieve plus or minus 2% of optimum moisture content. Compact each layer to not less than 90 and 95 percent of ASTM D-1557 maximum laboratory density for cohesive and cohesionless soils, respectively. Cohesive materials shall only be used for fill or backfill outside the building footprint. Cohesionless materials, only, shall be used as fill and backfill beneath the building footprint. Deviations from the stated compaction requirements are not permitted except in landscaped or seeded areas.

2.2 SOIL TREATMENT

- a. Soil treatment for termites shall be by the chemical method, and shall be applied to all excavation surfaces, both horizontal and vertical, located within the building line, and to any other surfaces deemed necessary to provide the required protection. The Design Build Contractor shall be duly licensed in the District of Columbia to apply the selected and approved soil treatment termitecide.
- b. The Design Build Contractor shall provide a 5-year written warranty against infestations or reinfestations by subterranean termites of the building constructed under this contract. Warranty shall include annual inspections of the building.
- c. If live subterranean termite infestation or subterranean termite damage is discovered during the warranty period, and the soil and building conditions have not been altered in the interim, the Design Build Contractor shall:

Re-treat the soil and perform other treatment as may be necessary for elimination of subterranean termite infestation;

Repair damage caused by termite infestation; and

Re-inspect the building approximately 180 days after the re-treatment.

d. Soil treatment termiticide shall be currently registered by the EPA. Manufacturer's label and Material Safety Data Sheet (MSDS) for pesticides proposed for use shall be submitted to the Contracting Officer for approval, prior to application.

2.3 PAVING

a. Design for all pavement on Fort McNair property shall be in accordance with the requirements of the US Army Corps of Engineers, and the Fort Myer Military Community (FMMC). Design for all pavement outside Fort McNair property shall be in accordance with the requirements of the District of Columbia Department of Transportation. For streets and roads, the anticipated axle

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National Defense University – Marshall Hall Expansion Request for Proposal Amendment #6

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load for design is 18,000 pounds; and the estimated volume of traffic is 1000 per day. For the secure entrance gate, the anticipated axle load for design is 18,000 pounds; and the estimated volume of traffic is 1000 per day. For the truck loading area and access driveway, the anticipated axle load for design is 18,000 pounds; and the estimated volume of traffic is 10 per day. For parking areas, the design vehicle for this facility is passenger cars, panel and pickup trucks, the anticipated axle load for design is 18,000 pounds, and the estimated volume of traffic 500 per day.

- b. Site signing and pavement marking will be in accordance with the Activity Area Development Plan, the Manual of Uniform Traffic Control Devices (MUTCD) and AASHTO.
- c. Provide new concrete curb and gutter on all new parking lots, driveways, and streets. Maintain existing curb or curb and gutter on existing streets, and replace where impacted by construction.
- d. As noted in Appendix B, asphalt pavement shall be a minimum 2.5 inch bituminous concrete surface course; prime coat; 4 inch dense graded aggregate (DGA) base course; 4 inch rapid drainage material (RDM) base course; 4 inch dense graded aggregate (DGA) base course; and 12 inch subgrade stabilization layer upon a stabilization geotextile. Pavement shall include an asphalt binder course, at a thickness determined by the designer. Soil test specimens shall be taken for a laboratory CBR test, and pavement design shall be based upon the actual subgrade CBR value. Concrete pavement design shall be in accordance with current Department of the Army or DCDOT criteria. Evaluate and document all subbase and base material as well as all subgrade for streets, parking areas, sidewalks, and curb and gutter, in accordance with DCDOT requirements and sound engineering practices
- e. Two Way access roads leading to parking areas will be paved with asphalt and will have a minimum width of 24 feet and a minimum turning radius of 15 feet. Access roads which also serve as fire lanes will have a minimum turning radius of 45 feet. Fire lane adjacent to building may be on pavement blocks to allow for turf establishment in this area. Such fire lane must be capable of supporting fire truck loading.
- f. Any paving, entrances, or street widening located outside the Fort McNair property or on District of Columbia Public right of way shall be designed in accordance with the standards and specifications of the District of Columbia Department of Public Works and the DC Department of Transportation.
- g. Loading areas, dumpster pads and dumpster approach slabs shall be minimum 6 inch depth, 3000 psi concrete pavement, with welded wire mesh reinforcement, and with minimum 8 inch aggregate base. Actual design shall be provided based on design criteria noted. Dumpster pads may not be closer than 83 feet to an occupied building.
- h. New parking areas will be paved with asphalt. Drive aisles will be minimum 24 feet wide. Parking spaces will have the following dimensions:

Standard parking spaces
 Visitors and VIP parking spaces
 feet by 18 feet
 feet by 18 feet

3) Handicapped parking spaces per ADA requirements

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i. Include landscape islands at the ends of rows of parking spaces.

2.3.1 ASPHALT PAVEMENT

- a. Asphalt mixes for vehicular pavement shall have a minimum stability of 1200 pounds as determined by the "Marshall Method of Mix Design".
- b. Maximum aggregate size for an asphalt mix shall be 1/2 the lift thickness. When this aggregate is subjected to the Los Angeles Abrasion test, the loss in material shall not exceed 40%.
- c. Asphaltic surface courses shall conform to DCDOT specifications for asphalt concrete and shall be placed in maximum 2 inch compacted lifts. Asphaltic binder and base course shall conform to the DCDOT standard specifications and may be placed in maximum 3 inch compacted lifts provided all density requirements are met.
- d. Typically, a 100 CBR base course material shall be used beneath asphaltic pavements. Base course shall be a minimum of 8 inches thick.
- e. Subbase courses underlie base courses and are generally constructed of material having a minimum CBR value of 30.
- f. Prime coats shall be used between new base course material and asphaltic surface course, or binder course.

2.3.2 PORTLAND CEMENT CONCRETE PAVEMENT

- a. Design of the traffic rated Portland cement concrete pavement within Fort McNair property shall be based on the Department of the Army criteria referenced in Appendix B. Design of traffic rated Portland cement concrete pavement outside Fort McNair property shall be based on current DCDOT criteria.
- b. Unless special conditions warrant, Portland cement concrete pavement sections shall be designed based on using 28 day, 650 psi flexural strength concrete.
- c. Concrete mix shall be designed as an air entrained concrete and shall have a maximum water cement ratio of 0.5. The amount of cement shall be as required to achieve the desired strength with the anticipated aggregate.
- d. Typically, Portland cement concrete pavement shall be designed as non-reinforced pavement. In areas where odd shaped slabs occur, i.e. length of slab exceeds width of slab by more than 25%, reinforcing shall be added to offset temperature related stresses. Clearly indicate those slabs which will require reinforcing on the drawings.

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- e. Joints shall be designed to accommodate edge stresses built up as vehicles approach the joint. This is normally accomplished through thickening the edges for expansion joints and by load transfer in keyed construction joints and contraction joints. Clearly show and label all joints and provide typical details for all joints used.
- f. Base courses under concrete pavement, shall have a minimum CBR value of 30.
- g. Glass beads for reflective markings shall conform to Fed Spec TT-B-1325, Type III, Gradation A and shall be applied in accordance with manufacturer's written recommendations.

2.3.3 PEDESTRIAN PAVING

- a. Provide sidewalks for pedestrian traffic in all areas where foot traffic will occur. Locate new sidewalks such that they maintain continuity of pedestrian traffic to and from the existing sidewalks adjacent to the site. Provide accessible routes in accordance with ADA criteria.
- b. All sidewalks shall be constructed of Portland cement concrete, with a 28 day design strength of 3000 psi compressive strength.
- c. Minimum width of sidewalks shall be 48 inches.
- d. Minimum thickness of sidewalks shall be 4 inch concrete on a 4 inch minimum thickness aggregate base.
- e. Tooled joints shall be placed in sidewalks at intervals approximating sidewalk width.
- f. Provide expansion joints in sidewalks at a maximum 100 linear foot spacing.
- g. Provide expansion joints at intersecting runs of concrete and where sidewalks abut buildings or other structures.
- h. Walks shall have a minimum transverse grade of 2%. Maximum desirable longitudinal grade shall be 4% and the absolute maximum longitudinal grade is 8.33%. The use of steps in walks shall be avoided whenever possible. The use of single riser steps is especially discouraged. When steps are unavoidable, they shall have at least three risers and shall be provided with handrails.

2.4 GATES AND BARRIERS

- Gates. Provide controlled access drop arm gates with security card readers and separate remote gate controller to any paved area within 82 feet of the building (building loading and delivery areas.)
- b. Bollards. Provide bollards on 3.5 foot spacing in areas where vehicles could penetrate force protection security standoff requirements. Provide bollards constructed of steel pipe having a

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National Defense University – Marshall Hall Expansion Request for Proposal Amendment #6 DACA31-02-D-0001 April 26, 2004 July 7, 2004

minimum diameter of 4 inches and a minimum height above grade of 24 inches. Bollards will be buried a minimum of 3 feet below grade, and encased in concrete totaling at least 12 inches in diameter.

c. Provide pop-up barriers and drop arm gates at the Access Control Point.

2.5 LANDSCAPING

- a. Additional topsoil shall be used only in areas where soil analysis shows that the existing soil is inadequate to support growth of plant materials. The existing soil shall be amended to make it suitable for plant growth. Provide independent evaluation, performed by a certified soil testing laboratory, of topsoil and existing soil utilized for turf and planting operations. Evaluation shall include recommendations for specific soil amendments. Samples are to be taken prior to installation of turf or plantings and addition of amendments.
- b. Provide for proper drainage of turf areas considering soil conditions or water table levels that may be detrimental to the growth of the specified plant materials. Grading of turf areas shall provide slopes that are smooth and continuous. Positive drainage shall be provided in all areas.
- c. Topsoil from the site should be stockpiled for use. Existing soils unsuitable for compacted fill may be used in landscaped areas if the soil is not contaminated.
- d. Temporary grass or other cover should be planted on topsoil stockpiles to minimize erosion and control dust, in accordance with DC erosion control criteria.

2.6. SIGNING

Functional requirements for exterior signs will be determined in coordination with the User and the Fort Myer Military Community. Absent other guidance, design requirements for such signs will be taken from the Manual of Uniform Traffic Control Devices (MUTCD) and the Fort McNair Installation Design Guide.

--END OF SECTION G20--

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Group Name
NDU - Second Floor
Space Function
NESA
Number and Area
Summary

Space Name	NSF	NTG	GSF
Office Suite			
Office - (1) 300 SF	300	1.25	375
Office - (10) 225 SF	2,250	1.25	2,813
Office - (3) 150 SF	450	1.25	563
Office - (19) 100 SF	1,900	1.25	2,375
Support Space			
Reception	150	1.25	188
Production Room - (2) 225 SF	450	1.25	563
Storage Room	150	1.25	188
Computer Support Center	150	1.25	188
Supply Room	150	1.25	188
Meditation Room	150	1.25	188
Library	150	1.25	188
Classroom/Conference Rooms			
Conference Room	375	1.25	469
Classrooms	0	1.25	0
Seminar Rooms - (5) 300 SF	0	1.25	0
Total for NESA	6,625	1.25	8,281
		ĺ	ĺ

Located in Conference Center. Located in Conference Center.



Group Name
NDU - Second Floor
Space Function
NESA Office Suite

Number and Area	NSF	NTG	GSF
Office	300	1.25	375

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Suite Entry Lock	Cypher
Office Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes

Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
2001 Fielgin	
Electrical	
110/120V	Yes
Ground	Yes
Other	



Group Name
NDU - Second Floor
Space Function
NESA Office Suite

Number and Area	NSF	NTG	GSF
Office - (10) 225SF	2,250	1.25	2,813

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Suite Entry Lock	Cypher
Office Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes

Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
Ground	Yes
Other	



Group Name
NDU - Second Floor
Space Function
NESA Office Suite

Number and Area	NSF	NTG	GSF
Office - (3) 150GSF	450	1.25	563

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Suite Entry Lock	Cypher
Office Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes

Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
Ground	Yes
Other	



Group Name	
NDU - Second Floor	
Space Function	
NESA Office Suite	

NESA	NSF	NTG	GSF
Office - (19) 100SF	1900	1.25	2375

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Suite Entry Lock	Cypher
Office Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes

Finish as /Dansas Data	
Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
Ground	Yes
	İ
	İ
	İ
Other	



Number and Area	NSF	NTG	GSF
Production Room - (2) 225 SF	450	1.25	563

Facility and a stall Consolition a	
Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes
Data - LAN/Ethernet	Yes
1	

Finishes/Room Data	
Wall	Paint
Floor	VCT
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
208/220V	Yes
Ground	Yes
Backup Power	Yes
Other	
Built In: Height/Depth	30"Dx34"Hx84"
Copier	Yes
Fax	Yes
Printers	Yes
Doored cabinets below	34"H
2 rows of shelves above	Yes



Number and Area	NSF	NTG	GSF
Storage Room	150	1.25	188

E : (10 III	
Environmental Conditions	
Temp. Range (Winter/Summer)	68F-78F
Humidity Range	50%
Ventilation Air (cfm/sf)	0.15
Structural Issues	
Security	
Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes

Finishes/Room Data	
Wall	Paint
Floor	VCT
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
-	
	_
Electrical	
110/120V	Yes
Ground	Yes
Other	



Number and Area	NSF	NTG	GSF
Computer Support Center	150	1.25	188

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
, i i ,	
Structural Issues	
Security	
Entry Lock	Key
Lighting	
Telecommunications	
Data (Fiber Optics)	Yes
Telephone	Yes
Data	Yes
Data - LAN/Ethernet	Yes

Finishes/Room Data	
Wall	Paint
Floor	VCT
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
208/220V	Yes
Ground	Yes
Backup Power	Yes
Other	



Group Name
NDU - Second Floor
Space Function
NESA Support Space

Number and Area	NSF	NTG	GSF
Supply Room	150	1.25	188

Environmental Conditions	
Temp. Range (Winter/Summer)	68F-78F
Humidity Range	50%
Ventilation Air (cfm/sf)	0.15
Ventilation All (cilii/31)	0.15
Structural Issues	
Otractarar 199acs	
Security	
Entry Lock	Cypher
Lifty Look	Сурпсі
Lighting	
Lighting	
Telecommunications	
Telephone	Yes
relephone	163

Finishes/Room Data	
Wall	Paint
Floor	VCT
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
-	
Electrical	
110/120V	Yes
Ground	Yes
Other	



Group Name
NDU - Second Floor
Space Function
NESA Support Space

Number and Area	NSF	NTG	GSF
Meditation Room	150	1.25	188

Environmental Conditions	
Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Entry Lock	Key
,	,
Lighting	
Lighting	
Telecommunications	
Data	Yes
Data	163

Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
Ground	Yes
Other	



Number and Area	NSF	NTG	GSF
Library	150	1.25	188

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	15
, , , ,	
Structural Issues	
Security	
Entry Lock	Key
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes
Data - LAN/Ethernet	Yes

Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
Ground	Yes
Other	



Group Name
NDU - Second Floor
Space Function
NESA Support Space

Number and Area	NSF	NTG	GSF
Reception	150	1.25	188

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
Structural Issues	
Security	
Suite Entry Lock	Cypher
Lighting	
Telecommunications	
Telephone	Yes
Data	Yes
Data - LAN/Ethernet	Yes

Finishes/Poem Data	
Finishes/Room Data	D : :
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
<u> </u>	
Electrical	
110/120V	Yes
Ground	Yes
Glound	163
Other	



Group Name
NDU - Second Floor
Space Function
NESA Classroom/Conference Space

Number and Area	NSF	NTG	GSF
Conference Room (8-10 PN)	375	1.25	469

Environmental Conditions	
Temp. Range (Winter/Summer)	68F/75F
Humidity Range	50%
Ventilation Air (cfm per person)	20
ventilation All (cliff per person)	20
Ctrustural laguage	
Structural Issues	
Occupitor	
Security	1.6
Entry Lock	Key
Lighting	
= 99	
Special Lighting	Dimmable
Special Lighting	Dimmable
Special Lighting	Dimmable
Special Lighting Telecommunications	Dimmable
Special Lighting Telecommunications Telephone	Yes
Special Lighting Telecommunications	
Special Lighting Telecommunications Telephone	Yes

Finishes/Room Data	
Wall	Paint
Floor	Carpet
Ceiling	ACT
Ceiling Height	9'-0"
Door Width	3'-0"
Door Height	7'-0"
Electrical	
110/120V	Yes
Ground	Yes
Other	
Chart Rail on all walls	Yes
	Yes 65" AFF
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	
Chart Rail on all walls	

SECTION 01320A

PROJECT SCHEDULE FOR DESIGN-BUILD 05/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11 (1995) Progress, Schedules, and Network Analysis Systems

1.2 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required project schedule reports.

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Initial Project Schedule; G AR.

Shows sequence of activities for work through the entire project and shall be at a resonable level of detail.

Preliminary Project Schedule; G AR.

Payment Purpose.

Periodic Schedule Updates; G AR.

These updates enables the Contracting Officer assess Contractor's progress.

Qualifications; G AR.

Documentation showing qualifications of personnel preparing schedule reports.

Narrative Report; G AR. Schedule Reports; G AR.

Three copies of the reports showing numbers, descriptions, dates, float, starts, finishes, durations, sequences, etc., as required.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a Project Schedule as described below shall be prepared. The scheduling of design and construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Designers, Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Project Schedule, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Project Schedule have been made.

3.3 PROJECT SCHEDULE

The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. A copy of the applicable scheduling software program (Primavera or euivalent) shall be provided to the Contracting Officer free of charge by the contractor. Manual methods used to produce any required information shall require approval by the Contracting Officer.

3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

The Project Schedule shall include an appropriate level of detail. Failure

to develop or update the Project Schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the Project Schedule:

3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations are greater than 20 days).

3.3.2.2 Design and Permit Activities

Design and permitting activities, including necessary conferences and follow-up actions and design package submission dates, shall be integrated into the schedule.

3.3.2.3 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, and delivery.

3.3.2.4 Critical Activities

The following activities shall be listed as separate line activities on the Contractor's project schedule:

- a. Submission and approval of mechanical/electrical layout drawings.
- b. Submission and approval of 0 & M manuals.
- c. Submission and approval of as-built drawings.
- d. Submission and approval of 1354 data and installed equipment lists.
- e. Submission and approval of Boiler Permit.
- f. Submission and approval of testing and air balance (TAB).
- g. Submission of TAB specialist design review report.
- h. Submission and approval of fire protection specialist.
- i. Submission and approval of Sprinkler System.
- j. Submission and approval of testing and balancing of HVAC plus

commissioning plans and data.

- k. Air and water balance dates.
- 1. HVAC commissioning dates.
- m. Controls testing plan.
- n. Controls testing.
- o. Performance Verification testing.
- p. Other systems testing, if required.
- q. Prefinal inspection.
- r. Correction of punchlist from prefinal inspection.
- s. Final inspection.

3.3.2.5 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: approvals, design reviews, environmental permit approvals by State regulators, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.2.6 Responsibility

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code.

3.3.2.7 Category of Work

All Activities shall be identified in the project schedule according to the category of work which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as designs, design package submissions design reviews, review conferences, permits, submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

3.3.2.8 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

3.3.3 Scheduled Project Completion

The schedule interval shall extend from NTP to the contract completion date.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.3.3 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from

the other shall be disabled.

3.3.6 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

3.3.7 Negative Lags

Lag durations contained in the project schedule shall not have a negative value.

3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

The Preliminary Project Schedule, defining the Contractor's planned operations for the first 60 calendar days shall be submitted for approval within 20 calendar days after the NTP is acknowledged. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after NTP.

3.4.2 Initial Project Schedule Submission

The Initial Project Schedule shall be submitted for approval within 40 calendar days after NTP. The schedule shall provide a reasonable sequence of activities which represent work through the entire project and shall be at a reasonable level of detail.

3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used.

3.5 SUBMISSION REQUIREMENTS

The following items shall be submitted by the Contractor for the preliminary submission, initial submission, and every periodic project schedule update throughout the life of the project:

3.5.1 Data Disks

Two data disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

3.5.1.1 File Medium

Required data shall be submitted via CD Rom, unless otherwise approved by the Contracting Officer.

3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number or person responsible for the schedule, and the MS-DOS version used to format the disk.

3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

3.5.2 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each update of the project schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis.

3.5.3 Approved Changes Verification

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from the NTP until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission and on monthly schedule update submissions. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows

from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.5.3 Critical Path

The critical path shall be clearly shown.

3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The Contracting Officer will approve activity progress, proposed revisions, and adjustments as appropriate.

3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

3.6.2 Update Submission Following Progress Meeting

A complete update of the project schedule containing all approved progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. As a minimum, the Contractor shall address the following items on an activity by activity basis during each progress meeting.

3.6.3.1 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in-progress or completed .

3.6.3.2 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

3.6.3.3 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

3.6.3.4 Logic Changes

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

3.6.3.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any approvals.

3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information.

Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the contract completion date.

3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the contract completion date of under 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number. $\,$
 - b. A brief explanation of the causes of the change.
 - c. An analysis of the overall impact of the changes proposed.
 - d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The proposed revisions to the schedule will be approved by the Contracting Officer prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

-- End of Section --